

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1        1. (Original) An apparatus comprising a receiving device  
2 working with space diversity for signals modulated with spreading  
3 code coefficients in time and for signals received over at least  
4 two channels, the receiving device comprising a mixer circuit and a  
5 spreading code demodulation circuit in the form of demodulation  
6 branches which have code inputs, characterized in that the mixer  
7 circuit shifts the phase of the signals of one of the channels,  
8 whereas the code inputs of one of the branches receive the  
9 spreading code and the inputs of at least another branch receive  
10 the conjugate spreading code.

1        2. (Original) An apparatus as claimed in claim 1,  
2 characterized in that the received signals before being mixed are

3 broken down into complex signals and in that the mixer circuit has  
4 a mixing input for reversing the imaginary part of one of the  
5 received signals.

1 3. (Previously Presented) An apparatus as claimed in claim 1,  
2 characterized in that a combining circuit is provided for combining  
3 the signals of the two branches.

1 4. (Previously Presented) A processing method for signals  
2 received over various channels, implemented in a system as claimed  
3 in claim 1 and having been subjected to a time diversity via a  
4 spreading code formed by code elements which appear in a complex  
5 form, characterized in that it comprises the following steps:  
6 - reception of signals over at least two channels,  
7 - mixing of signals of each one of the channels by a local  
8 oscillator to reverse the phase of the signals of one of the  
9 channels,  
10 - demodulation of the signals by means of a first  
11 demodulation branch which operates with said non-conjugate

12 spreading code elements and at least a second demodulation branch  
13 operating with said conjugate code elements,  
14 - combining signals supplied by the two branches to  
15 reconstruct the thus transmitted data.